Λ - Model for Physical Systems in Nature:

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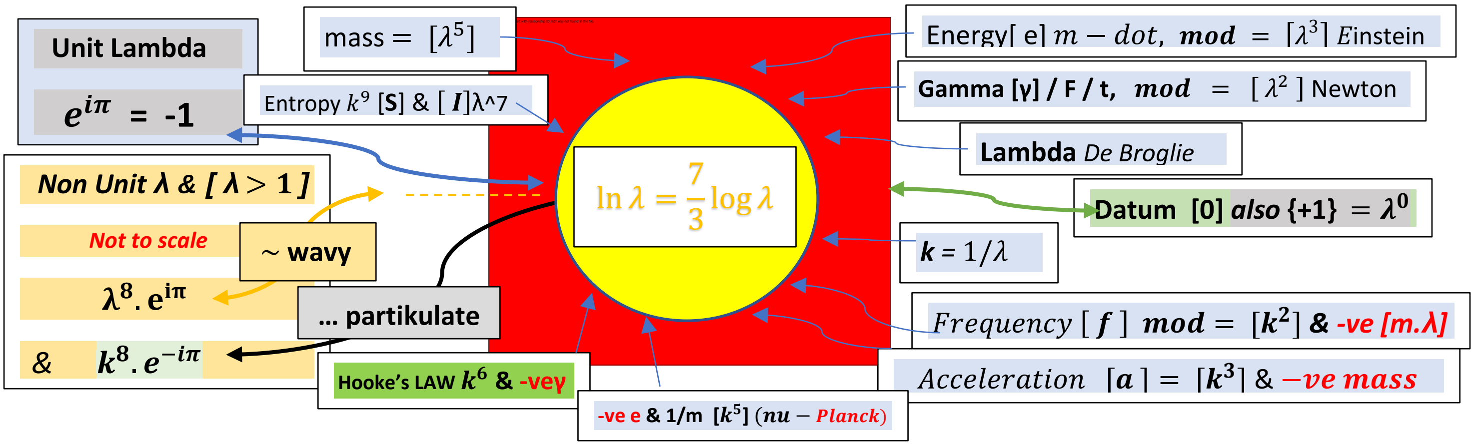

Fig*. 1 *Model lambda $[\ \lambda\ .\ e\wedge\frac{i\pi}{8}\ \ ]^n$ $[\ \lambda s\ \neq 0\ ]*$ is a *spinning number* rotating with **+ve** &/or **-ve** $[\boldsymbol{n}]$ integer

From **datum** [***0***] at (**n = *0***) *r.h.s.*, thus $\left[\ \lambda . e^{\left[\frac{i\pi}{8}\right]}\ \ \right]^{\mathbf{0}} = [\lambda^0 . e^0] = [1.1] = 1^2 = \boldsymbol{Unity\ modulus},$

to{ **n → ∞**}? *capped here at* (**n = (+/-) 16**) becomes $\boldsymbol{\lambda^{16}.e^{i2\pi}}$ or modulus $[\boldsymbol{\lambda^{16}}]\boldsymbol{x}$ [**1** complete **[acw]** revolution].

The **-ve** integers contribute *simultaneously* one suspects? a *clockwise* **[cw]** revolution

from datum unity, to [$\boldsymbol{\lambda^{-16}.e^{i(-2\pi)}}$] These *contraries* are seamlessly connected at Unity or zero peg above,

and resonate with $\boldsymbol{+ve}$ & $\boldsymbol{-ve}$ $\boldsymbol{'arrows\ of\ time'}$ in Physik.

This quasi *continuum locus* looks like an integer **quantized** , or step indexed $Logarithmic\ spiral$.

$\boldsymbol{Eadem\ mutata\ resurgo}.$

As the Lambda model is **scale invariant**, the ***Einstein continuum*** *is preserved in principle,* yet each lambda system has its own chunked ***De Moivre*** type, & displays integer based **Bohr** *model* characteristic.

Thus we can view the classic **Euler** identity $\boldsymbol{e^{i\pi} + 1\ = 0}$ in model terms as, $\boldsymbol{\lambda^8 . e^{i\pi}\ =\ -ve\ 1.\lambda^8}$

where *'unit' lambda applies.*

The negative Unity is thus equivalent to model $[\boldsymbol{m.m - dot}]$ = $\boldsymbol{mass\ x\ energy}$ product. $[\ \boldsymbol{m - dot} = [\boldsymbol{dm/dt}] \ = \boldsymbol{m/\gamma}\ ]$

& [$\boldsymbol{k^8.e^{-i\pi}}$] in clockwise sense, again for a unity lambda scenario only.

$$System[\boldsymbol{k}] = \frac{\mathbf{1}}{\boldsymbol{\lambda}}\ or\ generally\ \ \boldsymbol{\lambda^{-n}}\ =\ [\boldsymbol{k^n}].$$

$Example\ (\boldsymbol{n} = 16\ )\ thus\ [\ \boldsymbol{\lambda^{16}.e^{i2\pi}}\ ], has\ an\ equivalent\ in\ system\ parameters\ of\ [\boldsymbol{m^3}.\lambda]s\ =\ lambda^{16}$

i.e. as 1 {element} *highest order* **[16],** general degree **[n]** of *truncated* string polynomial system here.

Rearranged as $\boldsymbol{e^{i2\pi}.\lambda^{16}\ -\ m^3\lambda\ =\ 0}$ $has\ \boldsymbol{16\ complex\ root\ solutions}, i.e.\ generic\ root\ [\boldsymbol{\lambda.\ e^{i\pi/8}}]$

& generally scaling via *system lambda* & exponent **[n = +/- {0,1,2,3…}]** applies all *pegs of the wheel* above.

This *physical** model $[\boldsymbol{\lambda s}\ \neq \mathbf{0}\ ]$allows also for **-ve** integers as discussed, to illustrate dynamic **equilibrium** *forces* at work in *a 'closed' & yet evolving** balanced Lambda system. i.e. potentially a *duplex set* [16 **x 2**] of *contemporaneously acting **+ve & -ve integer cycles, counter phase & respectively*** **[λⁿ & kⁿ]** *defines the model*

$$\boldsymbol{\lambda - scheme\ in\ Nature}.$$

The Veritas identity & System Omega in the Physikle Λ-model.

System Omega $\omega = \left[\frac{k}{m}\right]$ **appears quite generally in Nature's Laws & familiar Physics identities & relationships.**

Thus we introduce a new lambda model version of System omega $[\omega]s$,
& ***respectfully suggest*** '***omega***' ***may be masked historically through variant essentially classical expressions***,
yet can be discovered anew via '***trial by Algebra***'.

First we introduce a Platonik identity invented, discovered, or imagined by the Author and known as

the Veritas *equation*, given here.

$$1. \quad h - dd\,.\,\lambda \quad = \quad h\,.\,\lambda - dd$$

$$\mathbf{1.a} \qquad \frac{h-dd\,.\,\lambda}{h\,.\,\lambda-dd} = 1$$

$$[-dd] \text{ means 'double'} - \text{dot or } \frac{d^2}{dt^2}, \qquad \text{where } [-dot] \text{ is likewise } \frac{d}{dt}$$

Newtonian dot notation is implied, albeit somewhat nuanced in a model parametrik sense,
i.e. dots may *flow* freely under action of a system omega, and in this fluid or *fluxions* sense, a standard both-ways *time symmetry* is invoked. What is non-standard is that system time { **t** }**s** and system general force { **F** }**s** are synonymous, or actually identical with the system gamma **[γ]s**.
A model hypothesis is such that a ***'time is force'*** argument applies. *{ subscript [s] = 'system' as applied in the Lambda model}*
Also system Omega is negative system gamma, or -ve F

$$2.\ \{\omega \ = -ve\gamma\ \}s \qquad \text{from} \quad \lambda - dd = \frac{\lambda}{h}\,.\,h - dd \quad \text{gives} \quad a = \frac{\omega}{-m}$$

$$\text{Equation } \mathbf{2.} \text{ is in effect } \mathbf{N.3.L.} \,\&\, \textbf{Hooke's Law } [F = -kx], \qquad \text{or } Fs = \{-ve\lambda\,.\,\lambda\}s$$

$$\text{in this model,} \qquad \mathbf{2.a.} \quad [\omega]s = -ve\,\{t\}s \ \text{ also.}$$

We introduce ***System Omega***: $\quad 3. \quad \left[\ \omega = \frac{mm}{\gamma^8}\ \right]s \quad = [\gamma^{-3}]s$ *also, & or equivalently we can get*

$$\mathbf{3.a} \qquad \left[\omega = \frac{k}{m}\right]s$$

this is the simple version, and reflects a ***'wave – partikle' mutuality*** *in this model.*

$$\text{Where } [k]s \text{ is the wave number of the system, classically } \left[k = \frac{1}{\lambda}\right]s\text{, thus}$$

$$\mathbf{3.b} \qquad \omega m \lambda = 1$$

$$\& \text{ a model } \textbf{de Broglie} \text{ expression can be inferred}$$

$$\mathbf{4} \qquad \lambda = \omega m \gamma$$

$$\text{Where subscript } [s] \text{ is generally implied going forward e.g. } * \text{ system lambda } [\lambda] = [\lambda]s$$

$$\text{note: system gamma} = \text{system lambda squared, in modulus sense \& literal expression of } K.2.L. \ \ Area = time.$$

$$5. \quad [\gamma] = [\lambda^2]$$

$$\text{and from } \mathbf{3.} \text{ above } [mm] \text{ must be } \gamma^5$$

$$\text{or we get system mass } [m]s$$

$$6.\ [m] = [\lambda^5]$$

$We\ can\ see\ from\ previous\ identities\ that\ all\ parameters\ can\ be\ expressed\ in\ lambda\ or\ [k] numbers\ of\ any\ physical * \ system\ under\ inspection.$

$In\ partikular\ 'Geometry\ reigns'\ \&\ Keplerian\ \boldsymbol{time\ shells}\ act\ forcefully\ (i.e. conservative\ [-veF]),$

$as\ concentric\ laminae\ \boldsymbol{orthonormal}\ to\ [\boldsymbol{x}, \boldsymbol{y}. \boldsymbol{z}]\ dimensions, of\ a\ Gaussian\ style\ mass\ distribution\ scheme\ \sum \rho. dV$

$By\ physical *\ \ we\ mean,\quad \boldsymbol{\lambda s \neq 0},\quad which\ implies\ also,\quad \boldsymbol{m \neq 0}$

$Obviously\ the\ \boldsymbol{k} - number\ is\ the\ reciprocal\ lambda\ number, etc, or\ classically$

$$\boldsymbol{k^n = 1/\lambda^n}$$

$So\ if\ lambda\ cubed\ (classically\ a\ volume\ \boldsymbol{V})\ yields\ energy,$

$$we\ may\ call\ this\ \boldsymbol{m - dot} = \left[\boldsymbol{\frac{dm}{dt}}\right] = \boldsymbol{\frac{m}{\gamma}}$$

$The\ reciprocal\ \boldsymbol{k} - number\ scenario\ would\ be\ inverse\ volume\ or\ \boldsymbol{k^3}, and\ we\ call\ that\ \boldsymbol{acceleration}$

$$or,\quad \boldsymbol{\frac{d^2\lambda}{dt^2}} = \boldsymbol{lambda - dd} = \boldsymbol{acceleration}\ [\boldsymbol{a}] = \boldsymbol{k^3} = \boldsymbol{k - dot} = [\boldsymbol{k/\gamma}]$$

$All\ identical\ we\ call\ this\ the\ \boldsymbol{gravity\ pixel}\ in\ the\ lambda\ model,$

And further add that $[\boldsymbol{a}]$ is identical with ***negative mass***, or

$$[\boldsymbol{a}] \equiv \boldsymbol{-ve\ m} = \boldsymbol{m - dddd} = \boldsymbol{m} - '4\ dots' = \boldsymbol{\frac{m}{\gamma^4}} = \boldsymbol{\frac{d^4[m]}{dt^4}}$$

$$\boldsymbol{The\ negative\ operator\ is\ \frac{1}{gamma^4}\ and\ adds\ a\ ½\ cycle\ clockwise\ rotation\ in\ the\ model}$$

$w.r.t\ horizontal\ the\ standard\ r.h.s. datum *\ on\ a\ unit\ lambda\ complex\ wheel$

$Thus\ 2\ negative\ operators\ in\ tandem\ gives\ 1\ full\ c.w. rotation.$

$In\ essence\ system\ 'inertial\ mass'\ lies\ on\ \lambda^5\ a.c.w.\ \&\ -ve\ mass\ lies\ on\ lambda^{-3}\ c.w. phase\ sense *.$

$Mass\ having\ being\ divided\ by\ lambda^8\ here,\quad as\ gamma = lambda^2,\quad stated\ previously.$

$\boldsymbol{The\ model\ views\ inertial\ mass\ as\ Action, and\ -ve\ mass\ as\ reaction\ or\ -ve\ action.}$

$$Or,\quad \boldsymbol{Action}\quad \boldsymbol{7.}\quad \boldsymbol{\gamma. m - dot = m},$$

$$\&\ \boldsymbol{-ve\ Action}\quad \boldsymbol{8}\quad \boldsymbol{-ve[\gamma. m - dot] = -ve\ m}$$

$$can\ be\quad \boldsymbol{8.a}\quad \boldsymbol{-ve\ mass} = [\ \boldsymbol{-ve\ gamma.\ energy}\quad (+)\quad \boldsymbol{gamma.\ -ve\ energy}\ ]$$

$[2] states\ in\ omegik\ superposition$

$$We\ note\ here\ that\ -ve\ energy\ is\ \left[\frac{lambda^3}{gamma^4}\right] = \left[\frac{\lambda^3}{\lambda^8}\right] = \frac{1}{\lambda^5} = k^5 = 1/m\ reciprocal\ mass.$$

$$Which\ supplies\ a\ useful\ model\ standard\ utilising\ [-ve\ m - dot] = \frac{1}{m}\ thus\ a\ variant\ model\ gamma, in$$

$$\boldsymbol{9.}\quad -ve\ [\ m\ .\ m - dot\ ] = 1$$

$and\ equivalent\ to$

$$Unity = [\ \{-ve\ mass. energy\}\ ] \leftrightarrow (+) \leftrightarrow [-ve\ energy. mass]\ ]$$

$[2]\ states\ convergent\ at\ r.h.s. datum\ peg\ [\lambda s^0 = \boldsymbol{+ve}1\ ], on\ Unity\ model\ complex\ wheel.$

$$\textit{With a little work most if not all of the previous identities can be morphed into \& flow thro each other,}$$

$$\textit{and we quote some model standards with resonance to classical familiars.}$$

$$\textit{from previous view w.r.t} \;\; Action = m, \quad -ve\ Action = -ve\ m = Reaction \equiv [a] \sim gravity$$

$$\textit{The product of action x reation yields the Gamma 'force' or } N.2.L. \;\&\; U.L.G.$$

$$\mathbf{10.} \quad \gamma = -m.m \quad or \quad [m.-vem] \quad \equiv \quad F = ma$$

$$\&\ with\ a\ -ve\ \mathbf{Operator}\ appled\ to\ \mathbf{10.}\ we\ \ get\ omega$$

$$\mathbf{11.} \quad \omega = -ve.-ve[m.m]$$

$$\mathbf{11.a} \quad \omega = [\ \{--m.\ m\}\ (+)\{-m.\ -m\}\ +\ \{m.--m\}\ ] \qquad [3]-states$$

$$as\ \ acc = -ve\ mass \ \ then, \qquad -ve\ a = -ve.-ve\ mass$$

$$-ve\ a = \left[\frac{m}{\gamma^8}\right] = \frac{\lambda^5}{\lambda^{16}} = \frac{1}{\lambda^{11}} = k^{11}$$

$$now\ \ k^{11} = S-dot = \frac{S}{\gamma} = \frac{dS}{dt} \quad i.e.\ \ entropy-rate$$

$$thus\ \ entropy\ \ [S] = k^9 \quad \&\ a.c.w\ sense$$

$$\textit{Thus we can produce another model omega expression}$$

$$\mathbf{11.b} \qquad \omega = -ve.-ve\,[m.m]$$

$$thus \quad \mathbf{11.c} \qquad \omega = [mS]-dot$$

$$\&\ expanded\ to$$

$$\omega = \{\ [\ m-dot\ .\ S\ ] \leftrightarrow (+) \leftrightarrow [\ m\ .\ S-dot\ ]\ \}$$

$$System\ Omega = [\ \{\ energy\ x\ entropy\ \} \leftrightarrow (+) \leftrightarrow \{\ mass\ \ x\ \ entropy\ rate\ \}\ ]$$

$$\textit{this last offers aid for darkness paradigms currently in vogue in Physik.}$$

$$\textit{The model views energy in the classical way, say in conventional}$$

$$\textit{Newtonian, Hamiltonian or Lagrangian sense, i.e.}$$

$$\textit{these express any dynamic system of kinetic \& potential energy states in mutual fluxion/s.}$$

$$This\ is\ m-dot\ in\ a\ general\ model\ sense, \qquad where\ the\ [-dot] operator\ is\ frequency, \qquad f = 1/t$$

$$thus\ the\ model\ contends,$$

$$12. \quad [\lambda-dot]^2 = [\lambda.\lambda-dd] \quad is\ likewise\ a\ frequency\ or\ \left[\frac{1}{\gamma}\right] expression.$$

as *lambda-dot is a k-number*, this is classically a velocity expression

Where $\lambda - dot = \left[\frac{\lambda}{\gamma}\right] = \left[\frac{dx}{dt}\right] = v, as\ lambda\ can\ be\ \{x\}\ of\ course.$

So we may derive a grounding in 12. for *Fitzgerald - Lorentzian* effects, such as length contraction etc,

A model maxim is developed.

A terrible beauty is born

Large Lambda schemes have low magnitude [k] − numbers, and thus very small acceleration number.

Conversely very small lambda schemes have large magnitude

[k] − number & thus very large acceleration.

We can further add

large schemes possess low magnitude entropy [S] & very low entropy rate [S] − dot, respectively.

Conversely large magnitude [S] & even higher $\left[\frac{dS}{dt}\right]$ ***are experienced in micro − lambda schemes.***

A fearful symmetry

seems apparent at Cosmological & quantum scales in Nature.

This maxim is counter to the standard view that the twain never meets in Quantum & Classically relativistic models, thus an 'idee fixee' developed. Science absolutely must! find a holy grail solution such as 'quantum gravity' to fix the disparity*.

The 'dichotomy' is potentially a phenomenological perspective only, largely historical in basis, & erroneous one might suspect. Local System Model [h ≡ a] *dispels this thro equality of course.

Physical lambda model adherents maintain that it is mistaken to mean fundamentally different physics is at work here.

In the λ − model, scale is invariant and model Physik rules are quite general, regardless of size, for any particular scheme/s under investigation.

Model statement: There are no Universal constants, rather there are multiple sets of 'unique' system numbers In multiple lambda schemes, which operate under Universal laws.

Let's look at some examples:

Keplers 3rd Law

$$\frac{R^3}{T^2} = constant\ [k]$$

Or in model terms, $R = \{r\} = \{x\} = [\lambda]$ *or system lambda, thus*

$$\frac{\lambda^3}{\lambda^4} \equiv \frac{\lambda^3}{\gamma^2} = \frac{energy}{momentum} = \frac{m-dot}{p}$$

$$= \frac{m-dot}{\gamma^2}$$

$$= \frac{m}{\gamma^3}$$

$$= \omega m$$

& as product $[\omega.mass]$ *equates to a system* $[k] - number$

i.e. $wm = k$, ***Keplers costant is the k − no of our local Binary System or Newtonian G.***

This allows us to gauge Solar scheme Omega at the Earth remove.

We use o.o.m. calculations and no units, or we end up with dimensionless ratios on occasion

otherwise the S.I. relevant unit or units are always implied.

$$\boldsymbol{Let\ \ M = 10^{30},\ \ m = 10^{25},}$$

$$\boldsymbol{\&\ let\ system\ mass\ [m]s\ =\ binary\ product\ [Mm],\quad law\ of\ lever\ resonance.}$$

$$\boldsymbol{and\ as\ the\ de\ Broglie\ yardstick\ is\ \lambda s\ =\ 10^{11}}$$

$$\boldsymbol{Then\ System\ Omega\ *, gives,\qquad \omega\ = \frac{k}{m}}$$

$$\boldsymbol{= \frac{1}{[m.\lambda]}\ \ = \frac{1}{[10^{55}.10^{11}]}}$$

$$\boldsymbol{=\ 10^{-66}.}$$

$$\boldsymbol{And\ as\ Omega\ =\ a^2\ then\ our\ local\ system\ acc\ pixel\ -ve\ mass\ =\ \sqrt{[10^{-66}]}}$$

$$\boldsymbol{=\ -ve\ m = [a] = modulus\ circa\ \ [\ h]\ the\ \ Planck\ unit\ of\ Action,}$$

$$\boldsymbol{we\ see\ it\ as\ \ -ve\ action\ of\ course.}$$

$*\quad [\boldsymbol{k}-\boldsymbol{dot}]^2 = [\ \boldsymbol{k}\,.\,\boldsymbol{k}-\boldsymbol{dd}\ ]$ *is equivalent to system Omega, or*

$$\boldsymbol{a}^2 = k.\frac{1}{m}\ =\ Omega$$

Conjecture w.r.t. Equation 12. $[\boldsymbol{\lambda}-\boldsymbol{dot}]^2 = [\boldsymbol{\lambda}.\boldsymbol{\lambda}-\boldsymbol{dd}]$

a transfer of one r.h.s.'denominator' lambda is a first step to

K.3.L *if* $[k]$ *i.e. thus also* $[k^2]$ *is kept 'relatively constant' the reciprocity relationship for the product* $[\lambda\,.\,\boldsymbol{a}]$

as conveyed in the model maxim, can be a candidate explanation for the ***Galactic rotation curves*** *conundrum.*

The observations multiply support flat velocity rotation curves, [12.] produces a ready ***M.O.N.D.*** *style explanation,*

actually a ***metrik density*** *[GammaRho] formalism, ... sans darkness .*

Instead of looking for 'missing' mass, we might look at $\boldsymbol{F} \propto \frac{\boldsymbol{1}}{\boldsymbol{r^3}}$ *where locally* $\gamma = mh$ *where* ***system m*** $= [\boldsymbol{Mm}]$ & $\boldsymbol{h} = k^3$

In any case equation 12.Is effectively, a classical $mv^2\ =\ mgh$, where, $[v\ = k\ = \left[\frac{\lambda}{\gamma}\right] =\ lambda - dot]$, $[g\ =\ a]$ & $[h\ =\ \lambda]$, we might now also restore a 'cancelled' system mass $[m]$ & omit the 1/[2] factor from the *Kinetic* l.h.s, we say the [2] can be fashioned as states, or

$[\lambda - dot]^2 = [\,\{\lambda.\lambda - dd\}\ \leftrightarrow (+) \leftrightarrow \{\lambda - dd.\lambda\}]\ =\ \{\,[\,\lambda\,.\boldsymbol{a}\,] \leftrightarrow (+) \leftrightarrow [\,\boldsymbol{a}\,.\lambda\,]\,\} = [2]$*states, trivially redundant:*

or in lambda script

$$\left[\ \frac{\lambda}{\lambda.\lambda}\ .\ \frac{\lambda}{\lambda.\lambda}\ \right]\ =\ \lambda\ .\ \left[\frac{\lambda}{\lambda.\lambda.\lambda}\right]\qquad transfer\ 1\ lambda\ to\ l.h.s.gives,$$

$$\frac{[\lambda.\lambda.\lambda]}{[\gamma.\gamma]}\ =\ \left[\frac{\gamma}{\lambda.\lambda.\lambda}\right]\qquad i.e.\ \ \left\{\left[\ \frac{r^3}{t^2}\right] = \left[\ \frac{t}{e}\ \right]\right\}\ \equiv k\ \ \ where\ \lambda^2 = \gamma,\ \&\ \ t^2 = \gamma^2 = p$$

$$\&\ as\ \{\ r^3\ \equiv\ \lambda^3\ =\ energy \equiv [m - dot]\ \},\ \ we\ can\ say\ \left[\frac{\boldsymbol{e^2}}{\boldsymbol{t^3}}\right] = \boldsymbol{Unity},\qquad pseudo\ style\ K.3.L.\ \ a\ la\ mode$$

$$\frac{\&}{or}, \{\ \boldsymbol{energy^2\ =\ mass\ x\ lambda}\ \}\ =\ \boldsymbol{\gamma^3}\quad or\ , \boldsymbol{reciprocal\ omega}, ...\ now\ we\ can\ look\ at\ Dirac.$$

Dirac's relativistic electron equationn rendered into the model

$$m\{\psi\} = i.\gamma\frac{d[\psi]}{dx}$$

$$in\ 1-d\ here\ say, \qquad thus\frac{d}{dx} = \frac{d}{d\lambda} = \frac{1}{\lambda}\ (approx.) = [k]s$$

$$in\ our\ model\ imaginary\ \{i\}\ is\ equivalent\ to\ system\ momentum\ , thus$$

$$\{i\} = p = gamma^2 = lambda^4 = \sqrt{[m.m-dot]} = \surd(-1)$$

$$also, we\ can\ cancel\ Psi\ both\ sides, for\ clarity, i.e.the\ pared\ down\ model\ Dirac, now\ gives$$

$$m = k/\omega$$

Schrodinger

$$ih-bar\ d\{\psi]/dt = H\{\psi\}$$

$$Again\ 'cancelling'\ [\psi]\ or\ allow\ Psi = Unity, \qquad let[\ i = p]\ as\ before, \qquad \&\ d/dt = -dot = \frac{1}{\gamma}$$

$$\&\ as\ \ h-bar = \left\{\frac{h}{2\pi}\right\}, \qquad we\ ignore\ factor\ [2] as\ indicating\ perhaps\ \ 2-states.$$

$$We\ get, \qquad \{i\ .h-bar\}-dot = energy \quad or,$$

$$[\ \{i-dot.[h-bar]\} \quad (+) \quad \{\ i.\ [h-bar]-dot\}\ ] = m-dot,$$

$$where\ we\ allow\ for\ a\ possibility\ of\ \ +ve/-ve\ energy\ on\ r.h.s.$$

$$Firstly,\ \ h-bar = -ve\frac{mass}{(2)\pi}$$

$$= -mp\ , \qquad\qquad as\ 1/\pi = p$$

$$= ap = k^3.\lambda^4 = \lambda\ \ in\ this\ case$$

$$then\ \{\ i.h-bar\}-dot \ \ gives,$$

$$[p.\lambda]-dot = [\ \{\ p-dot\ .\ \lambda\ \} \ \leftrightarrow\ (+) \leftrightarrow \ \{\ p\ .\ \lambda-dot\ \}\ ]s$$

$$or\ [2]\ states \ \ [\ \{\gamma.\lambda\} + \{\ p.k\}] = energy = modulus\left[\ lambda^3\ \right]$$

$$Now\ \ +ve\ energy = reciprocal\ acceleration\ (gravity) \quad or, \quad [\ a.e\ ] = Unity$$

$$\&\ if\ we\ plumb\ for\ \ -ve\ energy, that\ is\ identical\ to\ inverse\ mass.$$

$$So\ we\ see\ in\ the\ generalized\ T.D.S.E,$$

$$we\ have\ a\ very\ full\ exposition\ of\ the\ scheme, in\ either\ \&\ both,$$

$$a\ dynamic\ Superposition\ of\ [2]states$$

$$-ve[\ mass\ .\ \ energy] = Unity, \qquad identically\ [acceleration\ x\ energy]$$

$$\&/or$$

$$[mass\ .-ve\ energy] = Unity = [m/m]$$

$$A\ system\ incorporating + \ ve\ \ \& \ \ -ve\ aspects\ of\ mass, energy,$$

$$\&\ \ gravity\ at\ face\ value\ and\ the\ system\ Omega\ within.$$

Maxwell & Faraday.

$$-\frac{dB}{dt} = \nabla\, X\, E$$

$$We\ state\ some\ assumptions, \quad the\ minus\ sign\ here\ (-)\ is\ model\ -ve\ Operator$$

$$B\ can\ be\ [m.\gamma] = lambda^{7}\ unity\ wheel * peg\ coincident\ with\ both\ moment\ of\ inertia\ [\,I],$$
$$and\ also\ [S] = k^{9}, but\ we\ go\ with\ the\ former\ case\ here$$

$$so, \quad \frac{dB}{dt} = \frac{[m.\gamma]}{\gamma} = m$$

$$Likewise, \quad -ve\frac{dB}{dt} = -ve\ mass = [a]$$

$$\{t\} = [\,\gamma]s \quad , \quad \nabla = Del = \frac{d}{dx}\ in\ 1-d, and\ thus = [k]s$$

$$E = -ve\ frequency, \quad and/or - ve.-ve[m.\lambda]s\ identically = -ve\left[energy^{2}\right]\ thus\ E\ yields\ 1/mm$$

$$\&\ finally\ the\ classical\ [X]\ vector\ product, \quad is\ also = -ve\ Operator = \frac{1}{\gamma^{4}}$$

$$we\ get,$$

$$a = del\ X\ E$$

$$= k\,.-ve\frac{1}{mm}$$

$$= \frac{-vek}{mm}$$

$$= \frac{S}{mm}$$

$$= k^{9}.k^{10} = k^{19}$$

$$Now\ k^{19}\ is\ coincident\ with\ the\ 'peg'\ \left[\,k^{3}\right] = [a]$$

$$on\ the\ familiar\ unit - \lambda\ complex\ wheel$$

$$after\ 1\ full\ c.w.rotation\ by\ k^{16}, thus$$

$$-ve\ mass = a$$

Note: The model uses a *Unity lambda complex wheel with `16 *pegs* set apart at intervals of [π/8]

The general lambda [λs]

$$14.\ System\ Lambda = \left[\lambda\,.e^{i.\frac{\pi}{8}}\right]^{n} \quad n = +/-\{\,0,1,2,3,\}$$

$$+ve\ integers\ yield\ [\lambda]^{n}\ and\ -ve\ integers\ [k]^{n}$$

these, cycle in acw & cw rotation sense, respectively.

Maxwell cont.

Similarly on the unity wheel, we see [B] & [S] *share a coincident peg*,

therefore is it possible that [B] could a micro lambda

***phenomenon* label for entropy [S], and of course visa versa? Say,**

$$\omega = \left[\frac{mS}{\gamma}\right] = \left[\frac{mB}{\gamma}\right]$$

$$= [mS] - dot \ = [\{m - dot\,.S\} \leftrightarrow (+) \leftrightarrow \{m\,.S - dot\}]$$ **&/or**

= [mB]-dot = [{ m-dot . B } ↔ (+) ↔ { m . B-dot }]

$$Then \ \frac{w}{m} = B - dot \ = \frac{k}{mm} \ = \ k.E$$

$$Thus\ we\ derive\ a\ familiar, \quad E \ = cB \quad can\ be\ found$$

$$B \ = \ E.[k\gamma] \ = \ E.\lambda \quad thus$$

$$E \ = \frac{B}{\lambda} \equiv kB \ = cB \quad \&\ now\ also\ \ cS = kS = E = k^{10}$$ **& from**

w/m = B-dot **...for quantum scale* systems**

allowing that the $[B] - field\ phenomenon * \ \equiv\ entropy\ [S]$*, an historic mistook doppelganger, actually all 1 entity & running with it here.*

[-m.-m]/ m = dB/dt then,

$$-m \ = \ -dB/dt \ = \ [a],$$ **etc**

w.r.t to generic Platonik identities in the model there are many 2nd order equations or identities which allow for resonance with Classical ideas.

Generally any sensible *dummy parameter* [$]

+ve /-ve will do to emulate $\gamma\,.[\$] - dot \ = \ [\$]$ **examples,**

$$[\$] = \{\,mass, \quad lambda, \quad Hooke\ [K], \ entropy\,, \quad etc$$

$$Which\ aligns\ well\ with\ another\ 2nd\ order\ type$$

$$[[\$] - dot]^2 \ = \ [\$]\,.[\$ - dd]$$

$$and\ some\ notable\ examples\ are\ again\ lambda, \&\ [k], mass, entropy, omega, \&\ gamma, [K], etc,$$

Thus we may look at the Lambda model System gravity pixellation from an array of

cyclik & mutually iterative 'sources' especially so if we allow [c.w.] & [a.c.w] Unity complex wheel coincidence pegs.

$$e.g.\{entropy\ [S]\ \&/or\ [B] - field \ = [k^9]\ or\ [\lambda^7]\}\ \&\ /or$$

$$-ve\ mass = \ [a] = [k^3], or\ [k^{19}], or\ potentially?\ [\lambda^{13}]\ or\ 'gravity\ angle',$$

aligning with some modern paradigms i.e. 'emergence phenomenon'

linking perhaps,

$$system\ rate\ of\ entropy \frac{dS}{dt} with\ \ -ve\ gravity\ \ -a\ , which\ is\ also, -ve. -ve\ mass, in\ rotation\ or\ phase\ sense.$$

This [dS/dt] can be a candidate for Einstein's Cosmological constant Λ, in our Solar scheme

$$'S - dot' = \left[\frac{S}{\gamma}\right] \ = [k]^{11} \ = \ 10^{-122}$$ *, circa some current estimates of [Λ] ... 'dark energy' perhaps?*

Maxwell cont.

We'll approach it differently here, allowing a 2nd order gamma differential or double dot [-dd]

Acting on Maxwell's equations.

$$-\frac{d^2B}{dt^2} = \nabla X \frac{dE}{dt}$$

in model terms, $dE/dt = E - dot = 1/[mm\gamma]s = k^{12} = \omega^2$

so we get

$[-vem]/\gamma = -\omega^2.k$ **now transpose the gamma**

$-ve\ mass = -ve\omega^2.[\gamma k],$

yields the familiar s.h.m. expression

$$-\omega^2.\lambda = a$$

By transferring the -ve sign, we get $\omega^2.\lambda = -ve\ a \quad = S - dot = [\frac{S}{\gamma}]$

$$= \frac{dS}{dt}$$

$allows\ gravity - -entropy\ 'emergence'\ paradigm$

Lorentz Force equation

F = q [E + v X B]

There are many routes through this to yield [+ve &/or-ve] *force*

i.e. [F] gives *gamma or omega* respectively.

The standard assumptions apply,

say charge = +ve or -ve, or +q, -q

Charge in this model is [m.k] gives [q] = λ^4 **or [p] perhaps,**

& -ve[mk] = [-q] = k^4 **or [π] perhaps**

E = 1/mm = k^{10}

B = [mγ] = λ^7 **or could be [S] =** k^9

We can say [X] product is -ve Operator or a standard multiplier {x}

Velocity [v] can be [c] &/or system k, of course.

Fun can be had & we get several reasonable results for variant input

& some feel,… *more natural than others*

The Hamiltonian

(1) dq/dt = +ve ∂H/∂p

(2) -ve dp/dt = ∂H/∂q

$$I'm\ allowing\ previous\ relaxations\ w.r.t.\ 'fairly\ \ wide\ latitude'\ applies\ to\ the\ formalism$$

$$i.e.\ \ I\ often\ make\ no\ distinction\ between\ partial\ [\partial]\ \&\ [d],$$

$$and\ indeed\ freely\ cancel\ these\ on\ most\ occasions, to\ generate\ the\ \ 'pared\ down'identity\ or\ equation.$$

$$Generally\ the\ Hamiltonian\ is\ relaxed\ to$$

$$[H] = composite\ \ 'system\ \ 'energy = m - dot = \frac{dm}{dt}.etc$$

[q = lambda], [p = model momentum], [t = gamma], etc

Thus, we get

(1.a) k = ωm

(2.a) γ = -ve [m-dot].k

And as system gamma force = [m.k]-dot = [{m-dot.k } ↔(+)↔ {m.k-dot}]

And we can say l.h.s. gamma in (2.a) = omega, from ω = -ve [γ] and general commutativity

w.r.t. the minus sign, i.e. classically this can transpose across the equality, etc.

Note: The model sees an easier way than previous example, whereby we suggest, very respectfully, that a -ve sign may be missing on l.h.s. of conventional Hamiltonian [2],

but we can largely bypass that by rewriting Hamiltonian 1 in model terms

$$H1: \quad \lambda - dot = \frac{m{-}dot}{p} \qquad k = \frac{energy}{momentum} = \pi.[m - dot] = [\frac{m}{\gamma^3}]$$

then simply post a -ve sign on both sides of H1 to give,

$$H2: \quad -ve\ \lambda - dot = \frac{-ve\ m{-}dot}{p}$$

Applying the model mode, we get

H1: k = ωm

as before, & H2: gives [-ve k]= [-ve energy/ momentum] , or

$$H2: \quad S = -ve[\ \omega.m]$$

$$S = [\{-ve\omega\ .m\} \leftrightarrow (+) \leftrightarrow \{\omega.-ve\ m\}\ ]$$

or an entropy expression, where alternatively we could say, Hooke's constant is differentiated once w.r.t. gamma,

$$[\ dK/dt] = K/\gamma = K - dot = [k^7/\gamma] = S$$

$S = k^9$ ***c.w. 'peg'***

Of course this begs the Q? why not differentiate model Hamiltonians once again, or more.

$$*\,H1:\quad \lambda - dd = \frac{m-dd}{p}$$ ***gives [a] = -ve mass***

$$*\,H2:\quad -ve\lambda - dd \;=\; \frac{-ve\; m-dd}{p}$$ ***gives -ve[a] = dS/dt***

Nothing very extraordinary here as we could emulate these new model entries by a minor variant on Hamilton's originals, say for H1 alone, we could say.

H1.a:

$$\frac{\partial H}{\partial t}\cdot\frac{\partial t}{\partial p} = \frac{dq}{dt} \qquad allowing\ \frac{dH}{dp} = \frac{dq}{dt}$$

$$Or\ simplified\ to\ \frac{H}{p} = \frac{\lambda}{t} \qquad or,\ \ H.t \;=\; p.\lambda$$

$$that\ gives,\ \ \gamma.m - dot = mass \qquad of\ course.,as\ [p] \;=\; \lambda^4$$

H1.a: is identical to/& could also be, a la mode

$$\gamma - dot.\frac{\partial H}{dp} = q - dot \qquad allowing\ [\,e/p\,] \;=\; k,\ \&\ \ energy = pk = [pc]\,familiar$$

$$\&\,[e.\lambda] \;=\; p$$

And something similar but also inclusive of the -ve Operator <u>both sides</u> for remodelled H2, where we said H2 = -ve H1

$$-ve\left[\gamma - dot.\frac{\partial H}{dp}\right] \;=\; -ve\,[q - dot]$$ ***allowing [-ve energy /p] = -ve lambda***

$$and\ as\ -ve\ energy = \ reciprocal\ mass\,, \qquad and - ve\ lambda = Hooke\ [K], we\ get$$

$$1/mp \;=\; K\ - dot$$

$$[K]\ is\ Hooke's\ constant, or\ reciprocal\ Moment\ of\ Inertia\ [1/\,I]$$

$$Then\ another\ Unity\ identity\ is\ found\ \ \mathbf{m.p.K \;=\; 1}$$

$$now\ [m.K] \;=\; [\,lambda^5\ .Lambda^{-7}] \;=\; 1/lambda^2 \;=\; frequency,\ \ f \;=\; 1/gamma$$

$$Thus\ \ 1 \;=\; pf \;=\; p - dot \;=\; \left[\frac{p}{\gamma}\right] \;=\; \left[\frac{dp}{dt}\right] \;=\; \gamma^2/\gamma$$

$$gives\ system\ gamma\ [\gamma]s \;=\; [F] = \{t\}, in\ this\ scheme.$$

$Note$: *The classical Unity identity for reciprocal time & frequency [$f = 1/t$] also has a model analogue, in*

$$[\gamma - dot\,]^2 \equiv [\,\gamma\ .\ \gamma - dd\,] \qquad i.e. \qquad 1^2 \;=\; t.f$$

in lambda script we devolve down thro gamma

$$\left[\frac{\gamma.\gamma}{\gamma.\gamma}\right] \equiv \left[\,\gamma\,.\,\frac{\gamma}{[\,\gamma.\gamma\,]}\,\right] \qquad to\ give, \qquad \frac{[\,\lambda.\lambda\ .\ \lambda.\lambda\,]}{[\,\lambda.\lambda\ .\ \lambda.\lambda\,]} \equiv [\,\lambda.\lambda\,]\,.\,\frac{[\,\lambda.\lambda\,]}{[\,\lambda.\lambda\ .\ \lambda.\lambda\,]}$$

Lambda script is representative of a lambda scheme 'operating iteratively on itself' at perhaps? some base Platonik geometrik level in Nature.
That is to imply, it is One System lambda in 'fluxions'. Not the multiples of lambda arrayed in the fashion we see immediately above, that is merely our pedestrian attempt at algebraic formulism emulating some as yet, unknown dynamik dimensionality in Nature,

& thus can be mproved upon no doubt, with expanded lambda identity 14. $\left[\lambda.e^{\left[\frac{i\pi}{8}\right]}\right]^n$ *as 1st approximation in our model.*

Einstein, Planck, De Broglie & Heisenberg, et al

$$\boldsymbol{S.R. \quad \& \quad E = mc^2}$$

$$\boldsymbol{becomes\ energy = m - dot = mass\ .frequency}$$

$$\boldsymbol{E = m.k^2}$$

$$\boldsymbol{The\ model\ invokes\ a\ direct\ constant\ of\ proportionality\ for\ the\ mass\ energy\ equivalence}$$

Which in effect is also a variant Omega.

$$\textbf{14.} \qquad \gamma.m - dot = m$$

$$\boldsymbol{Which\ is\ a\ simple\ derivative\ from\ the\ system\ energy\ e = [mass/gamma] = [dm/dt]}$$

$$\boldsymbol{Or\ the\ Action\ principle, as\ seen\ in\ Heisenberg's\ pared\ back\ Uncertainty\ Principle}$$

$$\boldsymbol{Featuring\ energy\ \&\ time\ in\ product, with\ [h]\ as\ the\ mimimun\ of\ action,}$$

$$\boldsymbol{E.t\ = \geq h, \quad \&\ also\ \ used\ in \quad \Delta p.\Delta x\ \geq h}$$

$$\boldsymbol{Which\ can\ be\ pared\ back\ to\ yield\ Louis\ de\ Broglies\ wave\ hypothesis}$$

$$\boldsymbol{\lambda = h/p}$$

the $model\ explicitly\ allows\ for\ \boldsymbol{-ve}\ mass = [\boldsymbol{h}]$

$thus\ we\ have\ [2]\boldsymbol{de\ Broglies + ve}\ \&\ \boldsymbol{-ve\ lambda}\ in\ a\ sense$

1. $$\boldsymbol{m = p.\lambda}$$

$$\boldsymbol{+ve\ mass = momentum\ \ x\ lambda}$$

$$= \quad \boldsymbol{[lambda]^5, \quad locally\ [Mm]}$$

2. $$\boldsymbol{-ve\ mass} = \boldsymbol{-ve[p.\lambda]} = [\ \{\boldsymbol{-ve\ p\ .\lambda} \leftrightarrow (+) \leftrightarrow \boldsymbol{p.-ve\ \lambda}\}\ ]$$

$$= \quad \boldsymbol{[lambda]^{-3}}, \qquad \boldsymbol{locally\ -ve\ [Mm] = [h]}$$

$$2.\ gives \quad \boldsymbol{acc\ [a]} = \{ \quad \boldsymbol{[\pi.\lambda]} \quad \leftrightarrow (+) \leftrightarrow \quad \boldsymbol{[p.K\ ]} \quad \}$$

$$where \quad \boldsymbol{[p\ ] = \lambda^4}, \quad \&\ \boldsymbol{[K\ ] = k^7 = Hooke's\ constant.}$$

$As\ we\ introduced\ de\ Broglie\ here, we\ see\ the\ \boldsymbol{Photo-electric\ effect}$
$and\ the\ \boldsymbol{Einstein-\ Planck}\ relationship\ has\ similarly\ modelled\ omega\ attributes.$

$$\boldsymbol{E\ =\ h.\nu}\quad can\ posess\ (+ve/-ve)\ flavours,$$

$$\boldsymbol{-ve}\ E\ =\ -ve\ [mass\ .\ frequency] = [\ \{-ve\ m-dot\}\quad \leftrightarrow (+) \leftrightarrow\ \ \{m\ .\ -ve\ f\}]$$

$(\ \&)\ +\boldsymbol{ve}\ E\ =\ m-dot$ & +ve energy, potentially sourced via $\{\ m.-ve[m.\lambda] = \{gamma\ .\ lambda\} = \lambda^3$

$$The\ combination\ can\ yield\ up\ model\ identity$$

$$\boldsymbol{-ve[mass.energy]\ =\ 1}$$
$$\boldsymbol{thus}$$
$$\boldsymbol{[mass.energy]\ =\ -ve\ 1}$$

$$\boldsymbol{Unity = \lambda^0}\ \&\ \{\boldsymbol{n}\}\boldsymbol{x\ 2\pi\ repeats\ to\ \lambda^{16}} = \{\boldsymbol{2}\}\boldsymbol{\pi}, [\boldsymbol{a.c.w.}], \boldsymbol{etc}$$

$$\boldsymbol{And\ -ve\ 1\ =\ \lambda^8}\ \&\ \{\boldsymbol{n}\}\ \boldsymbol{x\ 2\pi\ repeats\ to\ \lambda^{24}}, [\boldsymbol{c.w.}], \boldsymbol{etc}$$
$$\boldsymbol{Where\ \frac{+ve}{-ve}}\ [\boldsymbol{1}\ ]\boldsymbol{can\ be\ fashioned\ by\ various\ periodic}\ \{\boldsymbol{k^n}\}\ \boldsymbol{of\ course\ also, with}$$
$$\boldsymbol{\frac{1}{2\pi}}\ [\boldsymbol{c.w.}]\boldsymbol{rotation\ sense\ application.}$$

$$w.r.t.the\ Photo-electric\ effect$$

$$\underline{kinetic\ \ energy\quad \boldsymbol{E=\ h.\nu} - \emptyset}$$

$we\ see, that\ the\ \boldsymbol{work\ function\ Phi}, can\ be\ seen\ as\ the\ need\ to\ overcome\ the$
$\boldsymbol{-\ ve}$ ‘$binding$’ $energy\ perhaps,$

$and\ in\ any\ case\ it\ is\ a\ re-working\ of\ the\ previously\ stated\ unit\ model\ identity.$

$\underline{\textit{The equivalence principle \& G.R.}}$

$The\ model\ says\ -ve\ mass\ =\ a\ =\ gravity\ or\ `curvature - geometry'$

$Thus\ a\ =\ k^3 = k - dot\ =\ 1/e, \quad and\ `geometrically\ =\ reciprocal\ Volume'$

$Now\ looking\ at$

$G\mu v\ =\ 8\pi G\, T\mu v$

$My\ assumptions\ are, \quad G\mu v\ yields\ `gravity'\ [a]$

$T\mu v\ is\ density\ Rho\ =\dfrac{mass}{Volume}\ or\ Boylesque\ gamma$

$Ignore\ factor\ [8]\ as\ states, or\ some\ such, \quad G\ =\ k - number, \quad pi\ =\ 1/p\ =\ k^4\ =\ 1/\gamma^2$

$then\ we\ get$

$Gravity\ =\ \pi.k.\rho$

$=\ [k.\rho] - dd$

$=\ [k - dd.\rho]\ \leftrightarrow (+) \leftrightarrow\ [k - dot.\rho - dot]\ \leftrightarrow (+) \leftrightarrow\ [k.\rho - dd]$

$=\ \left[\dfrac{\rho}{m}\right]\ (+)\ [a.1]\ (+)\ [k.f]\ \ \leftarrow [3] \rightarrow\ states$

$The\ 2nd\ \&\ 3rd\ term\ are\ acceleration/gravity\ [a], \quad \&\ equivalent\ k - dot, \quad respectively$

$The\ 1st\ is\ equivalent\ to\ [\gamma/m]\ =\ 1/energy\ =\ [a]$

$Thus\ we\ retrieve\ [-m\,.\,m - dot\,] = 1$

$w.r.t. Boyle's\ Law, \ [\ PV\ ] =\ constant$

$can\ be, \quad [\,\gamma - dot\ .\ m - dot] = [\,1\,].\ Energy$

$energy\ is\ the\ constant, gamma\ is\ the\ density,$

$\&\ pressure\ P\ =\ F/A\ =\ [\gamma/\gamma]\ =\ \gamma - dot\ =\ 1, \quad \&\ energy\ =\ \lambda^3\ =\ Volume$

$Hooke\ also\ deserves\ a\ mention\ as\ alike\ Kepler, he, perhaps\ unwittingly?, pointed\ towards\ the\ model\ identity$

$[-ve\ F\ =\ Omega]s\ \ with\ Hooke's\ law\ in\ 1660.$

$Nullius\ in\ verba.$

$There\ are\ multiple\ more\ examples\ I\ suggest, but\ hats\ off\ to\ Kepler\ in\ particular,$

$not\ to\ mention\ Tycho, \&\ Kopernik, \quad \&\ Galileo\ '\ eppur\ si\ muove\ '$

$\&\ with\ certainty, Giordano\ Bruno\ `the\ martyred\ one', had\ a\ stake\ also.$

$It\ seems\ a\ grand\ synthesis\ is\ in\ prospect, and\ lo!\ `All\ Religions\ are\ 1'.\ [W.Blake]$

$\&\ now\ these\ three\ remain.$

$\mathbf{1\,.c}\ \ [\ \ \{h - dd\,.\,\lambda\}\ \ \leftrightarrow (+) \leftrightarrow\ \ \{h - dot\,.\,\lambda - dot\}\ \ \leftrightarrow (+) \leftrightarrow\ \ \{h\,.\,\lambda - dd\}\ \ ]$

On Raglan road of an Autumn's day I met her first & knew ... The 'Peasant poet' Patrick Kavanagh.

Aeons before the Big Bang &/or One bright blue Rose

This business of coincidence pegs on the Unity Wheel, can reveal some surprising results, but we have to jump severally back & forth along 'constant slope' radials which cut thro 'bothwise' + ve & −ve integer spirals, and dance thro 'fantasy & faith' ... well after a Fashion. Firstly Ludwig Boltzman.

$$S = k \log W$$

I take $[W]$ to equal energy, & / or Volume, & $lambda^3$ & / or $m - dot = \left[\frac{m}{\gamma}\right]$. [k]Boltzmans constant.

Then o.o.m calculations local scheme, $S = 10^{-23} . \log [10^{11}]^3$

gives $S = 33 \, x \, 10^{-23}$ or $3.3 \, x \, 10^{-22}$ or $3.3 \, x \, f = \frac{3.3}{\gamma}$ say $\frac{3}{gamma}$

as $[f]s = [k]s^2 = [10^{-11}]^2 = [G]^2$

Now from Thermodynamiks: energy is $m - dot = ST$

we get, $[\ m = ST\gamma\ ]$ & $[T]s.\gamma = \lambda^{14}$ [a.c.w.] is 'coincident' with [c.w] $k^2 =$ frequency f

Thus (mass) $= S.f$

can this be true? Well we embrace bothwise rotation or phase 'sense' coincidence in Nature in this model.

$$[a.c.w.\ \boldsymbol{mass} - peg] \ @ \ [\boldsymbol{\lambda^5}] \approx [\boldsymbol{k^{11}}] \ @ \ [\ c.w.\ \{\boldsymbol{S.f}\} - peg\ ] = \left[\frac{S}{\gamma}\right]$$

& previously $[S]$ was $3.f$ so now, $[S].f = 3 . f^2$

$= [3.\pi]$ as $[pi] = f^2 = k^4$

& $k^4 = [\pi]s$ is a [c.w.] coincidence peg with Temperature $T = \lambda^{12}$ [a.c.w] $-ve\ T = [\ p\ ] - ve. -ve\ T = [\pi]$

So with seemingly no shame, ... I am claiming we have [3 K @ pi peg] if not? ... the $-$ ve π peg @$\boldsymbol{k^{12}}$

the CMBR circa 3 deg is a local system phenomenon.

[3] is the magnitude temp in Kelvin

& $[\boldsymbol{\pi}]s$ is the position $k^4 \approx \lambda^{12}$ peg co − existent in phase space of the generic λs model with Temp.

We can say Temperature @ λ^{12}, shares a common radial, with $-$ ve $T \equiv$ momentum $[p]$ & $-$ ve $p \equiv [\pi]$

All lie on the same slope, the lowest magnitude signal is on $-$ ve [pi] or

$-ve - ve. -ve\ T$ at $\{n = -12]$, or $[k^{12}]$ but that would be down in the noise I suspect @ mag circal 10^{-132}.

The intermediate values are $[\ \pi\ ]$ & $[\ \boldsymbol{p}\ ]$ @ integers

$[n = -4, \& + 4]$ yield 'signals' circa 10^{-44} & 10^{44} respectively, and the highest magnitude would be T @ $[n = 12]$, gives 10^{132}.

The System lambda thro generic Omega.

From the classical view $-\omega^2.x \;=\; a$, *as shown previously,* *let* $[x = lambda]$ *we can fashion*

$$\omega^2.\lambda \;=\; -ve\ a \qquad \& \qquad -ve\ a = \frac{dS}{dt} = S - dot$$

also, $* \ \omega^2 \;=\; \frac{1}{T} \;=\; k^{12}$ *from the wheel, whence from [mass = KT] we can yield classical* $\omega = \sqrt{\left[\frac{K}{m}\right]}\ *$

Then a model variant 'Thermodynamik & Entropik' model de Broglie presents itself.

System lambda $\boldsymbol{\lambda s} \;= [\,\boldsymbol{S.T}] - \boldsymbol{dot}$ *, or in expansion*

$$\boldsymbol{\lambda} \;=\; \{\ \{\,\boldsymbol{S - dot\,.T}\,\} \;\leftarrow (+) \rightarrow\; \{\,\boldsymbol{S\,.T - dot}\,\}]$$

& we can devolve down to the Hooke constant here,

$\boldsymbol{\lambda}$ = [K. T]-dd gives [3] flavours

$$\boldsymbol{\Lambda} \;=\; \{\ \left[\frac{\boldsymbol{d^2K}}{\boldsymbol{dt^2}}\,.\boldsymbol{T}\right] \;\leftarrow (+) \rightarrow\; \left[\frac{\boldsymbol{dK}}{\boldsymbol{dt}}.\frac{\boldsymbol{dT}}{\boldsymbol{dt}}\right] \;\leftarrow (+) \rightarrow\; \left[\boldsymbol{K}.\frac{\boldsymbol{d^2T}}{\boldsymbol{dt^2}}\right]\ \}$$

$$Then\ system\ [\,k]\ locally\ [G] is\ fashioned\ from\ lambda - dot,$$

$$\&\ gravity\ \ , k - dot\ \equiv\ lambda - dd\ =\ [a], \ldots\ locally\ [h]$$

We state as.

$$[\boldsymbol{k}] \;=\; [\boldsymbol{K.T}] - \boldsymbol{ddd}, \;=\; \boldsymbol{\omega KT}$$

$$[\boldsymbol{a}] \;=\; [\boldsymbol{K.T}] - \boldsymbol{dddd} \;=\; \boldsymbol{-ve}\,[\boldsymbol{K.T}] \;=\; [\ \{\,[\boldsymbol{-ve\ K}]\ .\boldsymbol{T}\,\} \;\leftarrow (+) \rightarrow\; \{\,\boldsymbol{K}.[\boldsymbol{-veT}]\}$$

$$\boldsymbol{Gravity} \;= [\,\{\frac{\boldsymbol{d^3S}}{\boldsymbol{dt^3}}\,.\boldsymbol{T}\} \;\leftarrow (+) \rightarrow\; \{\,\boldsymbol{K}.\frac{\boldsymbol{d^3\,T}}{\boldsymbol{dt^3}}\,\}\,]$$

thus our local scheme gravitas pixel

$$[\,\boldsymbol{h}\,] \;=\; \boldsymbol{\omega ST} \;\; (+) \;\; \boldsymbol{Kp}$$

Allows for a modern dynamik paradigm in

re − action $\equiv$ ***−ve mass*** *to augment the equivalent & discrete*

$$classical\ [\boldsymbol{a}] = \frac{\boldsymbol{d^2x}}{\boldsymbol{dt^2}}$$

$$i.e.\ \ local\ system\ gravity = [\boldsymbol{a}] = [\boldsymbol{h}] = \sqrt[4]{\left[\frac{\boldsymbol{K}}{\boldsymbol{m}}\right]} = \frac{\boldsymbol{1}}{\sqrt[4]{\boldsymbol{T}}} = \frac{\boldsymbol{1}}{\boldsymbol{e}}$$

thus our model classic variant $[\gamma]$, $\boldsymbol{-ve}[\boldsymbol{m.m - dot}] = \boldsymbol{Unity}$

This invokes the quantum of Action, & classical mechanics Entropy & Thermodynamics

+ New Λ-model System Omega, Entropy.

$$From\ this\ we\ can\ produce\ a\ \textbf{hot}\ new\ model\ for\ time, alongside\ other\ variant\ possibilities,$$

$$System\ gamma\ =\ Force\ \&/or\ time, as\ [\gamma]s\ =\ m.-vem$$

$$Then\ System\ time\ can\ be\ expressed\ Thermodynamikly$$

$$Time\ \{t\}s\ = \frac{m}{[\sqrt[4]{T}\ ]}\ = m.h$$

$$This\ would\ suggest\ that\ the\ local\ De\ Broglie\ circa\ 10^{11}\ (m)$$

$$Is\ our\ System\ lambda, yardstik\ exemplar\ of\ a\ 'closed'\ Physikle\ system\ in\ equilibrium\ with\ itself,$$

$$dynamikly\ self-regulating\ and\ @Peace! \ldots\ in\ Our\ best\ of\ all\ variant\ Worlds$$

$$\ldots\ ^{\wedge}'\ Tread\ softly, for\ you\ tread\ on\ my\ dreams!'\quad W.B.Y.$$

,

Appendix on [e] numbers resonance with our local lambda scheme.

What about the numbers? … follow the numbers.

Our lambda schemes have Logarithmic [e]integral. & we use o.o.m. calculations

We may note some resonance to familiars in Physik @ our local yardstick … here { e } is standard Euler number, &{ log } is base 10 ,

$$e^{\log[K]} \approx e^{[-77]} \approx 10^{-33} \quad -ve\ mass, \quad or\ k-dot, \quad or\ acc\ [a], \quad \sim [h]$$

$$e^{log\left[\frac{1}{K}\right]} \approx e^{[77]} \approx 10^{33} \quad m-dot\ energy\ [e]$$

$$e^{log}[S] \approx e^{-99} \approx 10^{-43} \sim System\ [\pi] \sim Planck\ \{t\}$$

$$e^{log}\left[\frac{1}{S}\right] \approx e^{99} \approx 10^{43} \sim System\ [p] = [mk] = GMm$$

$$thus, \quad [e^{-\log S}]-dot = \frac{Gmm}{r^2}$$

$$Similarly, \quad \left[e^{log\left[\frac{1}{K}\right]}\right]-dot = \frac{1}{\gamma}\left[e^{log\left[\frac{1}{K}\right]}\right] \sim [\lambda]s$$

$$\& \quad [e^{logS}]-dot = \frac{1}{\gamma}[e^{logS}] \sim [\omega]s$$

$$\& \quad \left[e^{\log\left[\frac{1}{S}\right]}\right]-dot = \frac{1}{\gamma}\left[e^{\log\left[\frac{1}{S}\right]}\right] \ gives \sim [\gamma]s$$

$$In\ shortened\ form\ e^{-22}\ or\ e^{Kb}\ ?\ or\ e^{f}, \quad or\ e^{\left[\frac{1}{\gamma}\right]} \sim 10^{-10}\ circa\ Atomic\ lambda$$

$$e^{-33}\ or\ e^{-vem}, \quad or\ e^{h}, \quad or\ e^{a} \sim 10^{-15}\ approx\ Nuclear\ lambda\ ....$$

$$e^{-44} \sim 10^{-19}\ circa\ 'charge'\ [q]\ elektron$$

$$e^{-55}\ or\ e^{log\left[\frac{1}{Mm}\right]}, \quad \&\ e^{-66}\ or\ e^{log\,\omega},\ approx\ mass\ of\ nucleus\ \&\ electron\ respectively$$

$$e^{55}, \quad \&\ e^{66}\ approx\ mass\ of\ Earth\ \&\ Sun\ respectively$$

$$e^{121}\ \&\ or\ e^{-log[S]}\ approx\ product\ mass\ Mm$$

$$e^{log[S]} = e^{-121}, \sim -ve[Mm]-dot \equiv 1/[Mm] \ ... \ \&\ so\ on.$$

$$Utilising\ the\ model\ view\ on\ Entropy\ \&\ Hooke\ constant\ relationship\ S\ =\ K-dot,$$

$$we\ can\ add\ further\ insight\ to\ the\ complex\ wheel, which\ yields\ \frac{1}{4}\ integer\ detail,$$

$$\&\ we\ can\ state\ these\ here.$$

$$\lambda\ =\ e^{-\left[\frac{log\ S}{4}\right]},\quad thus\quad k\ =\ e^{\left[\frac{log\ S}{4}\right]}$$

$$And\ we\ can\ build\ our\ model\ with\ \left(\frac{+}{-}\right)\left\{\frac{n}{4}\right\}\ incrementals$$

$$\lambda - wise\ [a.c.w.]\ \&\ k - wise\ [c.w.], respectively.$$

System Gamma = λ^2 *or* $\gamma = e^{\left[-\frac{1}{2}\, log\ S\right]}$ $System\ frequency\ \ f = \frac{1}{\gamma},\quad f = e^{\left[\frac{1}{2}\, log\ S\right]}$

$$the\ mixture\ of\ \ [e]\ here\ with\ base\ 10\ [Log]\ is\ probably\ a\ reflection\ of\ the\ \ chosen\ \ S.I. units$$

$$using\ base\ 10\ , and\ the\ fact\ that\ Natural\ logs\ govern\ \ growth\ scenarios\ in\ Nature.$$

$$Energy\ e\ =\ e^{\left[-\frac{3}{4}\, log\ S\right]}\quad momentum\ p\ =\ e^{[-\ log\ S]}\quad mass\ m\ =\ e^{\left[-\frac{5}{4}\, log\ S\right]},\ m.\lambda\ \ =\ e^{\left[-\frac{3}{2} log\ S\right]},$$

$$\&\ so\ on\ ,\qquad -ve\ \ \{n\ x\ ¼\}\ integer\ increments,$$

$$\&\ Acceleration\ a\ =\ e^{\left[\frac{3}{4}\, log\ S\right]},\ \pi\ =\ e^{[\ log\ S]},\ -ve\ energy\ =\ 1/m\ =\ e^{\left[\frac{5}{4} log\ S\right]},\ Omega\ \omega\ =\ e^{\left[\frac{3}{2}\, log\ S\right]},$$

$$etc\qquad +ve\ \{n\ x\ \frac{1}{4}\}\ integer\ increments$$

$Thus\ \ \{c.w\}\ peg\ \ [k^9]\ =\ entropy\ yields$ $S = e^{\left[\frac{9}{4}\, log\ S\right]}$

$$\&\ as\ [S]\ could\ be\ any\ dummy\ parameter\ \ [\$]\ yields\ a\ familiar,$$

$$ln[\ \$\ ] = \frac{9}{4}\ \ log[\ \$\ ],$$

$$Which\ is\ a\ reasonable\ 1st\ order\ approximation\ on\ the\ standard\ conversion\ ratio.$$

$$However\ we\ can\ probably\ do\ better\ using\ the\ variant\ Gamma\ expression$$

$$m\ =\ \gamma.e^{-logK}$$

$$Then\ transpose\ the\ gamma\ to\ give$$

$$m - dot\ =\ e^{-logK}$$

$$Where\ m - dot\ =\ energy\ [e]\ =\ lambda^3, and\ K\ =\ Hooke\ constant\ [k^7]\ =\ lambda^{-7}\ \ =\ \gamma.S$$

$$Where\ I\ further\ suggest$$

$$Boltzmanns\ constant\ Kb\ =\ frequency\ of\ our\ local\ scheme\ say\ approx.\ 10^{-22}\ =\frac{1}{gamma}$$

Thus Boltzmanns law S = k log W , can be Sγ = log e   where I say W = energy in a sense

Thus   we get   K = ln energy, not quite there?, so it requires a slight mod, and we get back to the model variant here.

$$m - dot\ =\ e^{-logK}$$

$$\lambda^3\qquad =\ e^{-log\lambda^{-7}}$$

$$then\ \ 3ln\lambda = -.-7log\lambda$$

$$or\ equivalently\ in\ conventional\ math$$

$$3ln\lambda = 7log\lambda$$

$$\ln\lambda = \frac{7}{3}\log\lambda$$

I give you the end of a Golden string, ...

Dante Virgil & the Elektrik Apple by Matagouri.